

Pattern Master Grading Guide

Communication is a critical aspect of science; if no one understands what you've done or its importance, it's pretty much the same as not having done anything. This exercise focuses on two aspects:

- first, it requires you to discover a rule (make all the blocks 'happy')
- second, you must describe this rule in a clear way. This is harder than it sounds--assume your reader knows nothing about the game or your solution

Rubric:

Task & Value:	To receive full points:
(50+ points) Understanding the rule. 55 for a 'medium' rule; 60 for a 'hard' one. You demonstrate understanding on page 2 in the program, which becomes available after you have sorted cards correctly. <i>If you fail to achieve this step, or if your description is incorrect, you receive zero points for the assignment.</i> Choose an easier one you're sure of rather than garbling a difficult one.	<ul style="list-style-type: none"> • Make sure you are logged in • Make sure you select 'store for grade' once you have solved the puzzle you want submitted. The most recent puzzle that you 'store for grade' is what will be graded. This is not necessarily the puzzle for which you received the highest score
(15 points) Clarity of description of underlying rule. Should allow puzzle to be solved and understood by an inexperienced person.	<ul style="list-style-type: none"> • Clear enough to read once and be understood • NOT a step-by-step description of the process you went through to solve the puzzle • Simple rule true for EVERY card in the puzzle
(15 points) Explain a specific example drawn from your saved solution. Should supplement the rule description	<ul style="list-style-type: none"> • Refer to specific cards and features of the cards • Grader can look at the puzzle and know immediately which card(s) are being referred to • Uses clockwise-counter-clockwise, not left/right
(10 points) Three or four sentences summarizing the specific skills you used and how they might be relevant to you in <i>your</i> future (i.e. problems you might face in your future careers or other real life situations)	<ul style="list-style-type: none"> • Skills must be specific • Explanation for how they will be used in your future must also be specific • NOT 'I will face many problems in my future and I will have to be tenacious in solving them, just like I was for PatternMaster'
(5) Statement of independence: "I did this assignment without direct assistance from others or internet cheat sites" (sign or type name)	<ul style="list-style-type: none"> • Type or write into your report; sign

Strike	Consequence
Rule incorrect	Zero points on assignment
Not submitted to dropbox by close	Assignment late
File format not readable by Word or .pdf	Zero points on assignment (this will apply to all future assignments as well)
Work saved 'For later' rather than 'For grade'	50% off

EXAMPLE, next page

Image: <http://blc.arizona.edu/courses/181Lab/Graphics/QFigs/PMaster.pdf>

Description of Rule: The puzzle solved dealt with the relationship between the inner bottom symbols of the card 'looked at' and the symbol (always T or F in this case) of the card 'looking'. Each card 'looks' at its counterclockwise neighbor. A card is 'happy' if its inner symbol correctly predicts the match between the bottom two circles in its anti-clockwise neighbor. A 'T' (as in *true*) is displayed when the two symbols match, whether both or right with a black bullet center, or black with a white center. If the neighbor's shapes are unmatched, then the 'looking' card should display an 'F' (as *false*).

> Specific Example: Take the orange-filled octagon at the "9 o'clock" position on the left. It is 'being looked at' by its neighbor at the next clockwise position, the blue triangle. The triangle is 'happy' because it displays F, correctly indicating the UNmatched circles within the orange octagon. The octagon itself is 'happy' because it displays 'T', correctly predicting the *matching* (white w/ dark core) inner shapes in the green rectangle just counterclockwise of it.

> Skills used [*this section should be creative and user specific*]

> I did this assignment without direct assistance from others or internet cheat sites
--Bruce Patterson